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DESIGN DEVELOPMENT REPORT
OCTOBER 1972

FEDERAL RESERVE BANK OF BOSTON

. Station
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FEDERAL RESERVE BANK
OF BOSTON

BOSTON, MASSACHUSETTS 02106
TELEPHONE (617) 426-7100

FRANK E. MORRIS
PRESIDENT

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10 October 1972

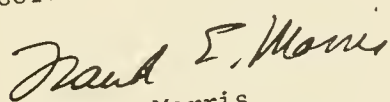
Dear Friends:

This report has been developed to provide
a brief explanation of the Federal Reserve
Bank of Boston's new building program.

The new building design will allow us to
better serve the District One banking needs
and to accommodate inevitable growth.

We hope as you read this brochure you will
share in our sense of anticipation as the
Federal Reserve Bank of Boston prepares for
the 200th birthday of our nation and
transferring our activities to our new home.

Cordially,



Frank E. Morris

FEM/gkh

**FEDERAL RESERVE BANK
OF BOSTON**

SENIOR OFFICERS

Frank E. Morris, President
Earle O. Latham, First Vice President
Daniel Aquilino, Senior Vice President
D. Harry Angney, Senior Vice President
Norman T. Byrnes, Senior Vice President
Robert W. Eisenmenger, Senior Vice President

BOARD OF DIRECTORS

James S. Duesenberry, Chairman
Louis W. Cabot, Deputy Chairman
Mark C. Wheeler
Ralph A. McNinch
William M. Honey
G. William Miller
F. Ray Keyser
John M. Fox

BUILDING COMMITTEE

Bruce L. Craig, Chairman
John A. Hayes
Jarvis M. Thayer, Jr.
Frank P. Manley
Bruce W. Bean
Niels O. Larsen
Richard A. Walker

ARCHITECTS

Hugh Stubbins

Principal Architect & Designer

Eugene R. Racek

Project Director

Peter F. McLaughlin

Affiliated Project Designer

Lloyd E. Kleypas

Designer

Bailey Silbert

Designer

Peter J. Scott

Designer

CONSULTANTS

Becker and Becker
New York City

Programmers

LeMessurier Associates
Cambridge, Massachusetts

Structural

Jaros, Baum & Bolles
New York City

Mechanical
Electrical
Vertical Transportation

Golder Gass
Cambridge, Massachusetts

Soils Investigation

William Crocker
Boston, Massachusetts

Site Survey

[illegible]

FEDERAL
RESERVE
BANK

EXISTING SITE

The proposed building site of approximately 5.7 acres is bounded by Atlantic Avenue and Dorchester Avenue, Congress and Summer Streets, in the South Station area. It is conveniently located to the financial and commercial districts, public transportation, and is one of the city's prime areas for development.

PUBLIC TRANSPORTATION

The new Federal Reserve Bank of Boston will have convenient access to public transportation. A subway entrance at the corner of Atlantic Avenue and Congress Street provides access to the MBTA. Bus service is also readily available.

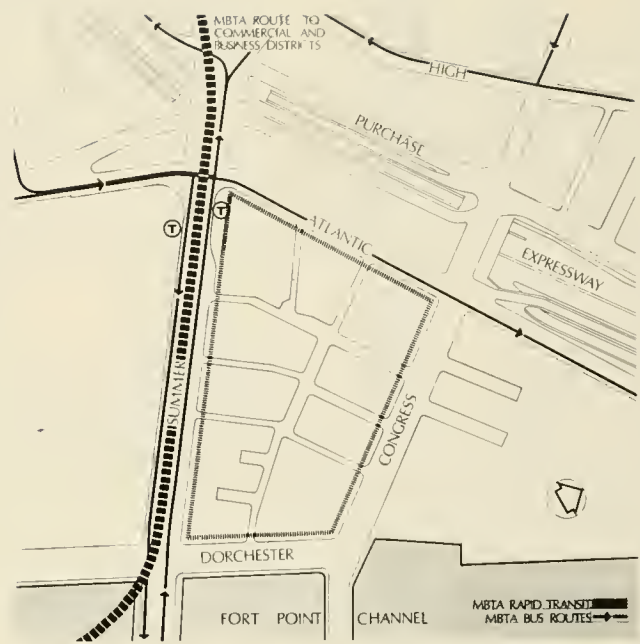
PEDESTRIAN ACCESS AND VEHICULAR CIRCULATION

All streets bordering the Bank's site have two-way traffic with the exception of Atlantic Avenue, where traffic flows east. It is not expected that this traffic pattern will change. However, two important changes are anticipated. The City plans to relocate Summer Street approximately 110 feet to the west and will abandon old Dorchester Avenue. Both changes will result in additional site area, enlarging the plaza space to the west.

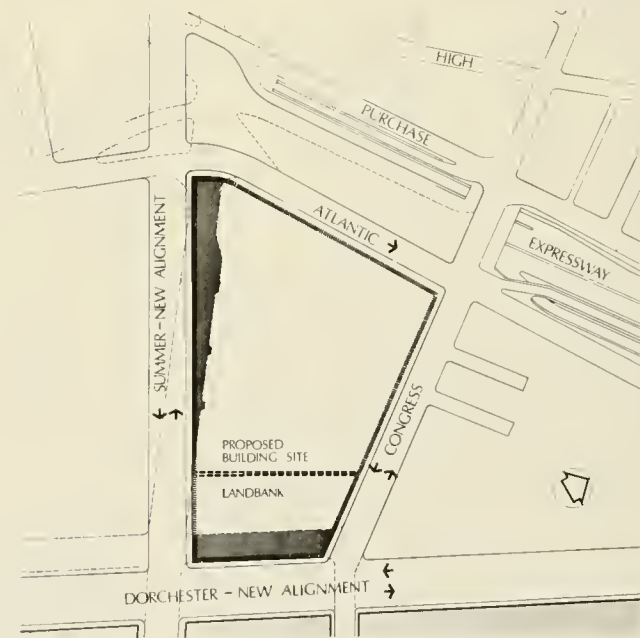
LAND BANK

Fortunately the area of the property provides additional land to accommodate future growth or another building. Initially this space may be landscaped and in part, create a "buffer zone" between the Bank and Fort Point Channel. Additional land will accrue to the Bank as the Boston Redevelopment Authority implements its plans for realignment of Summer Street and for a new Dorchester Avenue.

EXISTING SITE
PUBLIC TRANSPORTATION



VEHICULAR TRANSPORTATION
STREET REALIGNMENT
LAND BANK



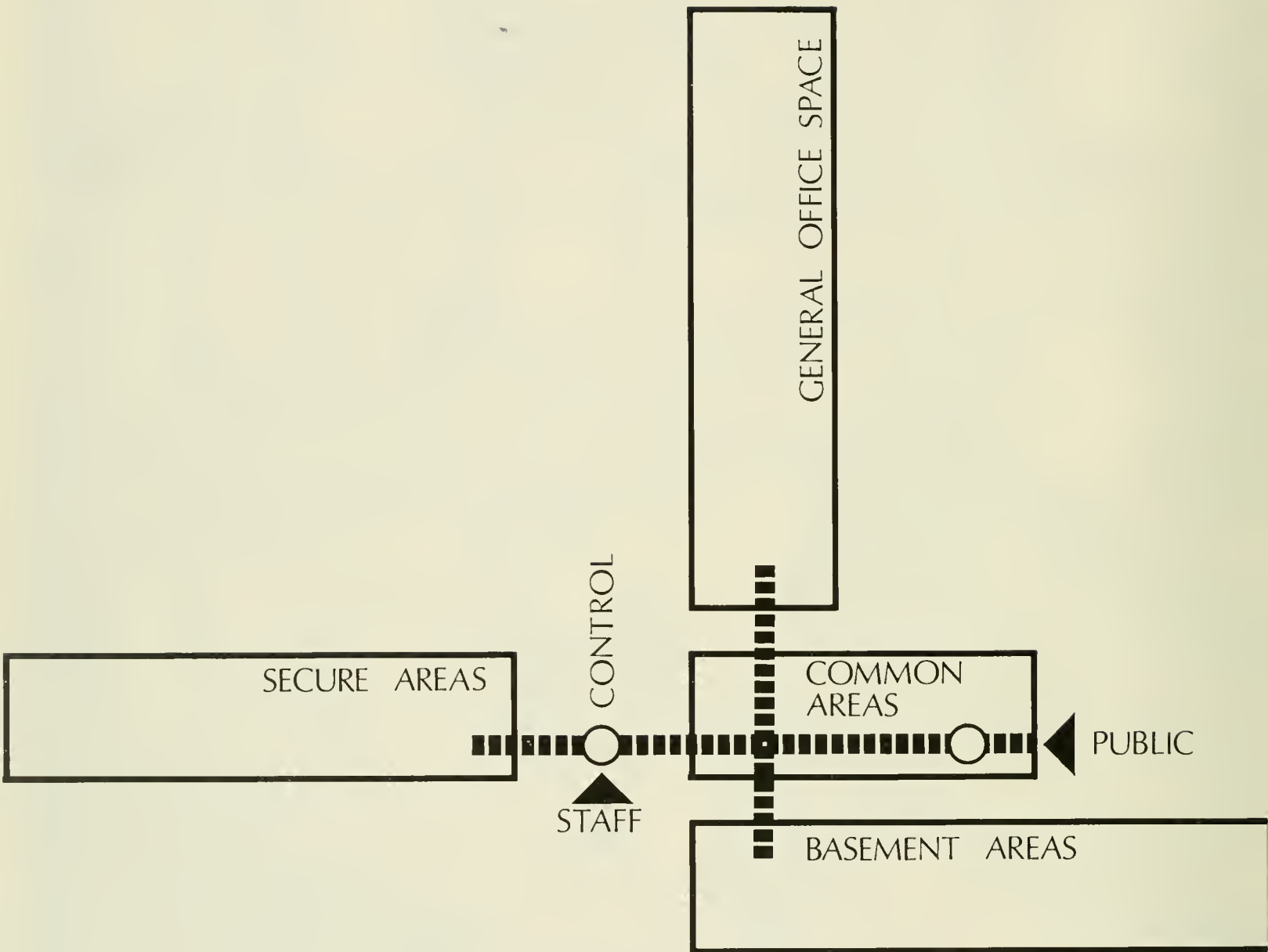
ENVIRONS

The Federal Reserve Bank of Boston will be the heart of an area revitalized by the addition of a new 60-story office tower, a 10-story office building, and a new transportation center. In addition, the Boston Redevelopment Authority plans a parking garage for approximately 5,000 cars, new pedestrian-oriented shops above the expressway, and an innovative moving sidewalk.

LEGEND

1. Federal Reserve Bank of Boston
2. Transportation Center
3. Dewey Square Office Building
4. Ten Floor Office Building
5. Keystone Building
6. Pedestrian Oriented Facility
7. Proposed Project
8. Hotel Facility





DIAGRAMMATIC SECTION

ARCHITECTURAL CONCEPT

An excellent and adequate site makes it possible to interpret the program in a logical way and to organize the Federal Reserve Bank's new building into its four natural divisions, designing each in a proper relation to the whole. These four major divisions are: 1) Secure Areas requiring large floors; 2) flexible office space including rental areas for smaller departments; 3) public entrance and common facilities for recreation, food service and public relations; 4) service areas, including parking.

These divisions have been conceived and expressed in regard to their functional requirements and arranged in such a way as to accommodate inevitable change.

The coin, currency, check and data operations are contained in large floors of about 55,000 to 60,000 square feet that can be controlled as a secure block.

The coin operation and its vault are located on the ground floor for ease of handling and distribution. The currency department, vault, and the Federal Reserve Agents' vaults are placed on the first level below grade ensuring protection as well as convenience.

Delivery access to these departments for armored vehicles is through a Security Court which is separated from the building's general delivery area. It is located at ground level allowing easy access with a traffic system using a two-door security lock to permit guards to inspect each vehicle before it passes into the Court. Within the Court a Protection Mezzanine permits complete and continuous observation.

General Office areas requiring less than maximum security are situated in a tower, where floors gross about 18,000 square feet, providing a better and more humane working environment. The tower floors are designed to give clear, open space with maximum flexibility for change and shifting of department functions. Service cores and vertical transport are placed on two end walls, thus leaving clear space in between. Columns are set back from the exterior walls allowing horizontal, mullion-free windows. The expressive quality is one of grace with strength.

The public banking area is situated on the second floor of a link which connects the secure block to the office tower. It is easily accessible by elevator, requires a minimum of staff, and commands a direct view of the principal entrance lobby.

Employee lounge facilities, library, cafeteria, kitchen, cooperative store, etc. are placed on top of the building block convenient to workers in both the secure block and the office tower.

General Delivery and Service entrance will be found at the first basement level providing areas for delivery of mail, checks, general and restaurant supplies. A ramp under surveillance and door control provide vehicular access to this level.

The Board Room, Executive Offices and Executive Dining Rooms and Lounge are located on the top two floors with a panoramic view of Boston and the harbor.

An auditorium is provided for banking management seminars and community programs. Complete audio-visual facilities are planned. Conference rooms are located in the connecting link convenient to banking personnel and public alike.

A Money Museum will be situated under tiered gallery walkways adjacent to the auditorium. A special skylight extending from a point 18 feet above the ground to the fourth floor provides daylight for the upper floors of the secure block.

Twelve elevators serve the office tower. They are divided into two banks and located at the two ends of the structure. Four passenger and two freight elevators serve the secure block. The passenger elevator capacity is 3500 pounds with a speed of 500 feet per minute while the freight elevators have an 8000 pound capacity and a speed of 250 feet per minute.

General office spaces are modular designed using fluorescent fixtures giving 85-100 foot candles at working level. Concealed air supply and returns will be located in the fixtures for interior spaces while special lighting will be utilized in lobbies, executive/dining and other special areas.

An emergency light and power system will be included to serve stair, elevator, and selective lighting as well as security and alarm systems, computer and other critical power loads.

The building will of course be completely air-conditioned. A combination of steam and electricity will supply heat and cooling.

Parking for 165 cars includes a car wash in a total area of 90,000 square feet in the second basement level under the plaza.

There is potential to develop a helicopter landing pad on the roof of the Security Building which would permit controlled access to the bank.

The garage and other secure areas will serve as emergency shelters as necessary.

The Tower is being designed as a steel structure. It is an economical design as its main wind bracing is accommodated in the elevator cores at each end.

The horizontal spandrels on the facade are designed to carry the perimeter induction air supply and to protect the glass from excessive solar heat gain, thereby reducing the air conditioning load. This configuration also has a tendency to reduce the downward acceleration of wind usually associated with tall buildings.

A modular underfloor duct system will be used for power and communication systems, allowing for flexibility and change.

At present the secure block and all below grade structures are being planned as reinforced concrete. Vaults will be constructed for maximum security.

Much thought has been given to the development of the area surrounding the site. Several discussions have taken place with the developers of adjacent properties and their architects, in a spirit of cooperation.

The building has many new features both in plan and exterior treatment that will make it a significant contribution to the City as well as an expression of its purpose, and — most of all — a pleasant and joyful environment in which employees can work.

AREA DISTRIBUTION

The programming firm of Becker and Becker was engaged by Hugh Stubbins and Associates in April,1970. In accordance with Federal Reserve Guidelines, personnel and net area projections were made for the years 1974, 1980, 1985 and 2005. Personnel projections were translated into net space requirements, and the building designed to provide for the Bank’s growth needs through the year 2005. A 20 percent contingency factor is included to accommodate uncertainties.

Hugh Stubbins and Associates, in utilizing the report of Becker and Becker, has reflected the programmed requirements for a functional building complex, with particular emphasis on the flexibility demanded by constant changes in technology and administration.

BUILDING AREAS	GROSS SQUARE FEET	NET USABLE SQUARE FEET
General Office Areas (Tower)	502,597	301,010
Secure Areas	256,657	222,203
Common Facilities	133,278	64,924
Basement Service Areas (Nonsecure)	245,968	93,473
TOTALS	1,138,500	681,610

DISTRIBUTION OF PROGRAMMED SPACES

**GENERAL OFFICE SPACE
TOWER**

- Accounting
- Auditing
- Bank Examination
- Loan/Credit
- Executive
- Fiscal
- Legal
- Personnel
- Planning/Projects Analysis
- Public Services
- Purchasing
- Regulations G. T. U. Z.
- Research
- Board of Directors' Facilities
- Emergency Program
- Research Library
- Federal Reserve Employees' Credit Union
- Medical
- Telephone Control
- Banking Services
- Data Administration
- Data Planning
- Remittance/Adjustment
- Filing (Uncurrent Only)
- Boston Clearing House
- Coffee Areas
- Duplicating
- Employee Lockers
- Shared Conference
- Building Administration

SECURE AREAS

Data Operations
High Speed Check Handling
Administration/Low Speed Check Handling
Currency
Currency Vault
Coin/Currency Administration
Coin
Coin Vault
Federal Reserve Agent
Federal Reserve Vault
Fiscal, Securities Division
Security Receiving
Registered Mail/Post Office
Protection Department
Safekeeping/Custody
Safekeeping/Records
Noncash Collection
Coffee Areas
Duplicating
Employee Lockers
Shared Conference Rooms

COMMON AREAS

Lobby
Staff Entrance & Security Control
Employee Lounge & Recreation Area
Cafeteria
Auditorium
Conference Rooms
Money Museum
Public Banking Space

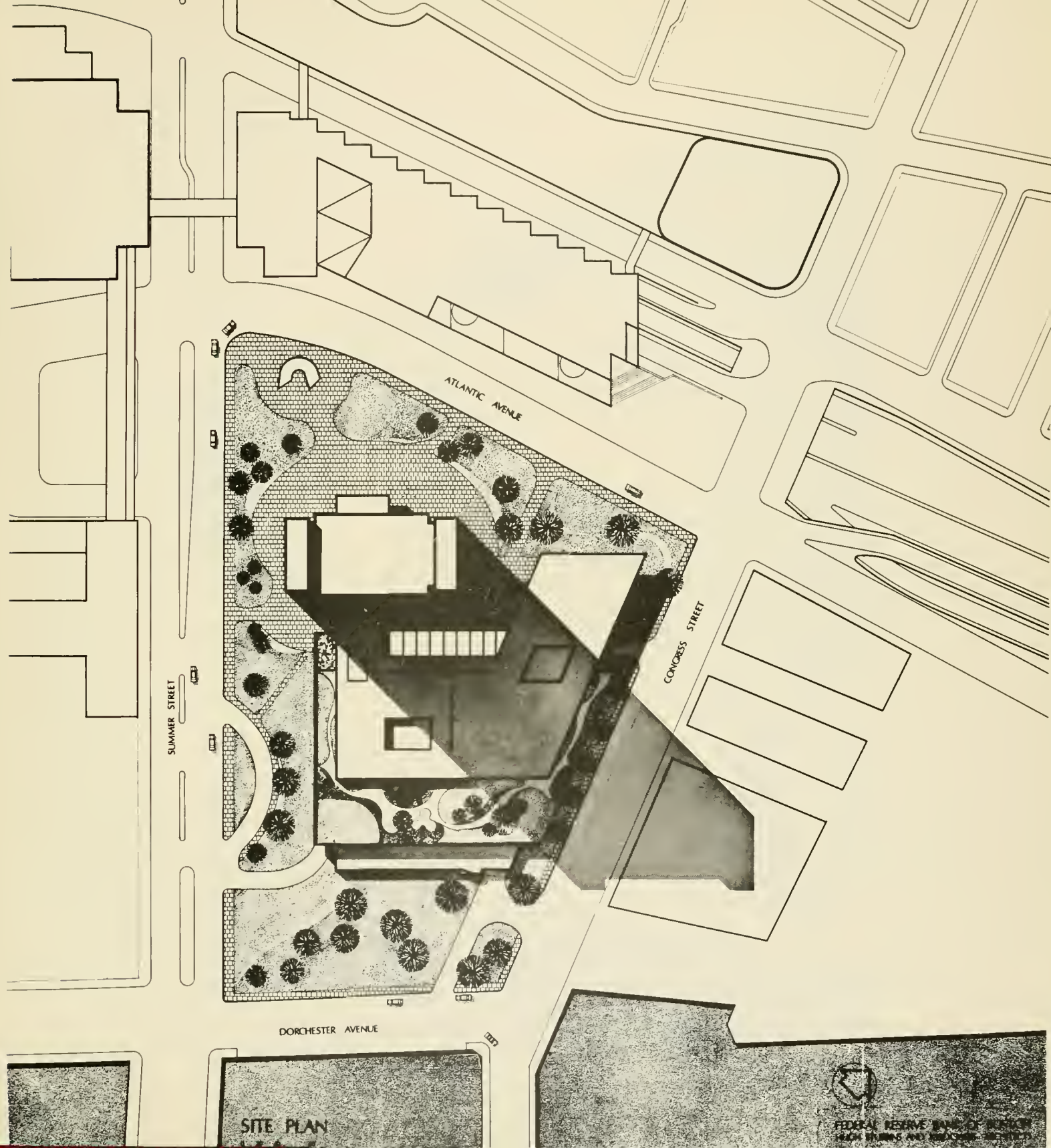
FIRST BASEMENT

- Building Service Dock
- Shipping and Receiving
- Central Supply
- Mail and Check Receiving
- Central Mail
- Paper Disposal
- Mechanical
- Kitchen Receiving
- Exit to MBTA Station

SECOND BASEMENT

- Parking
- Mechanical

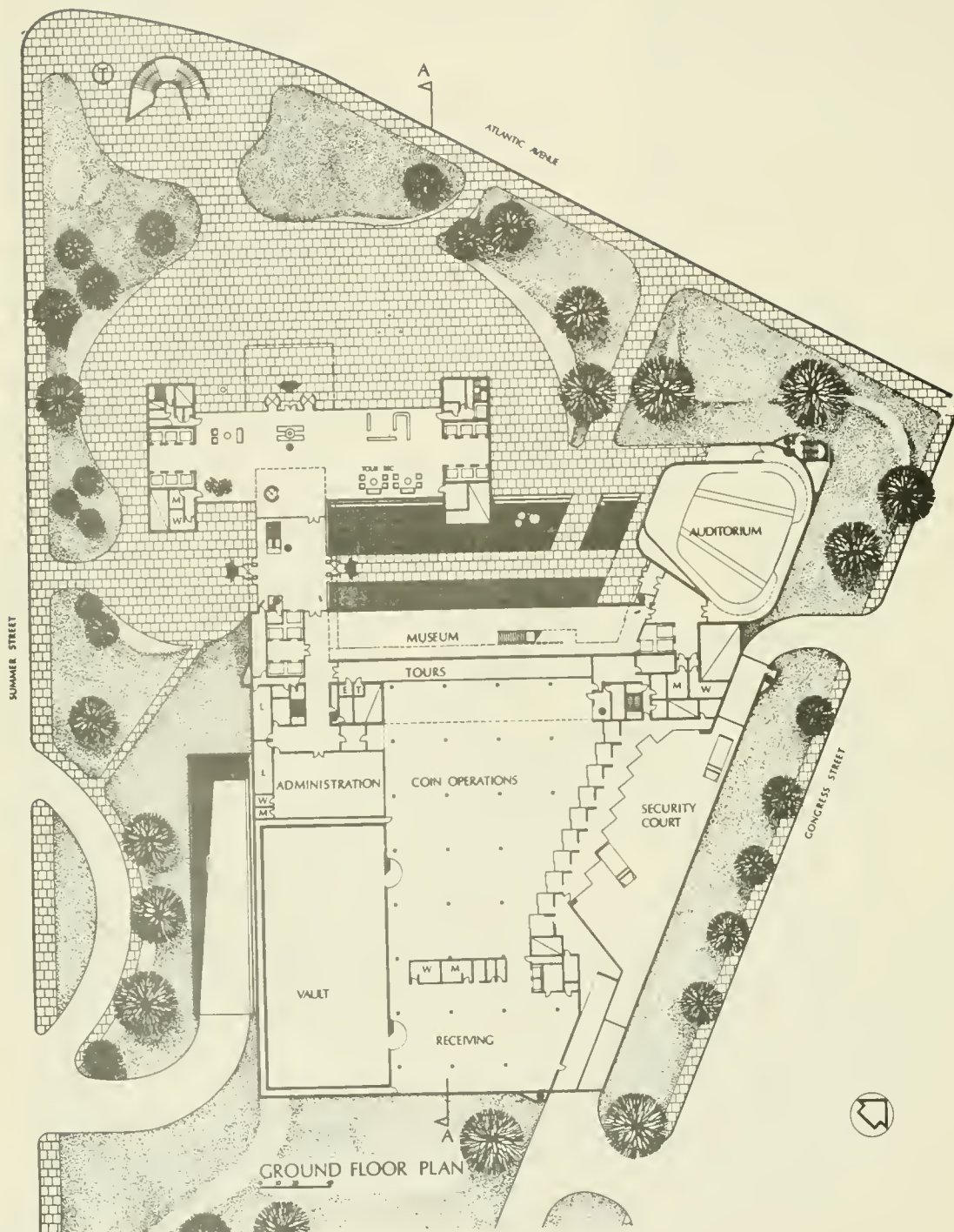


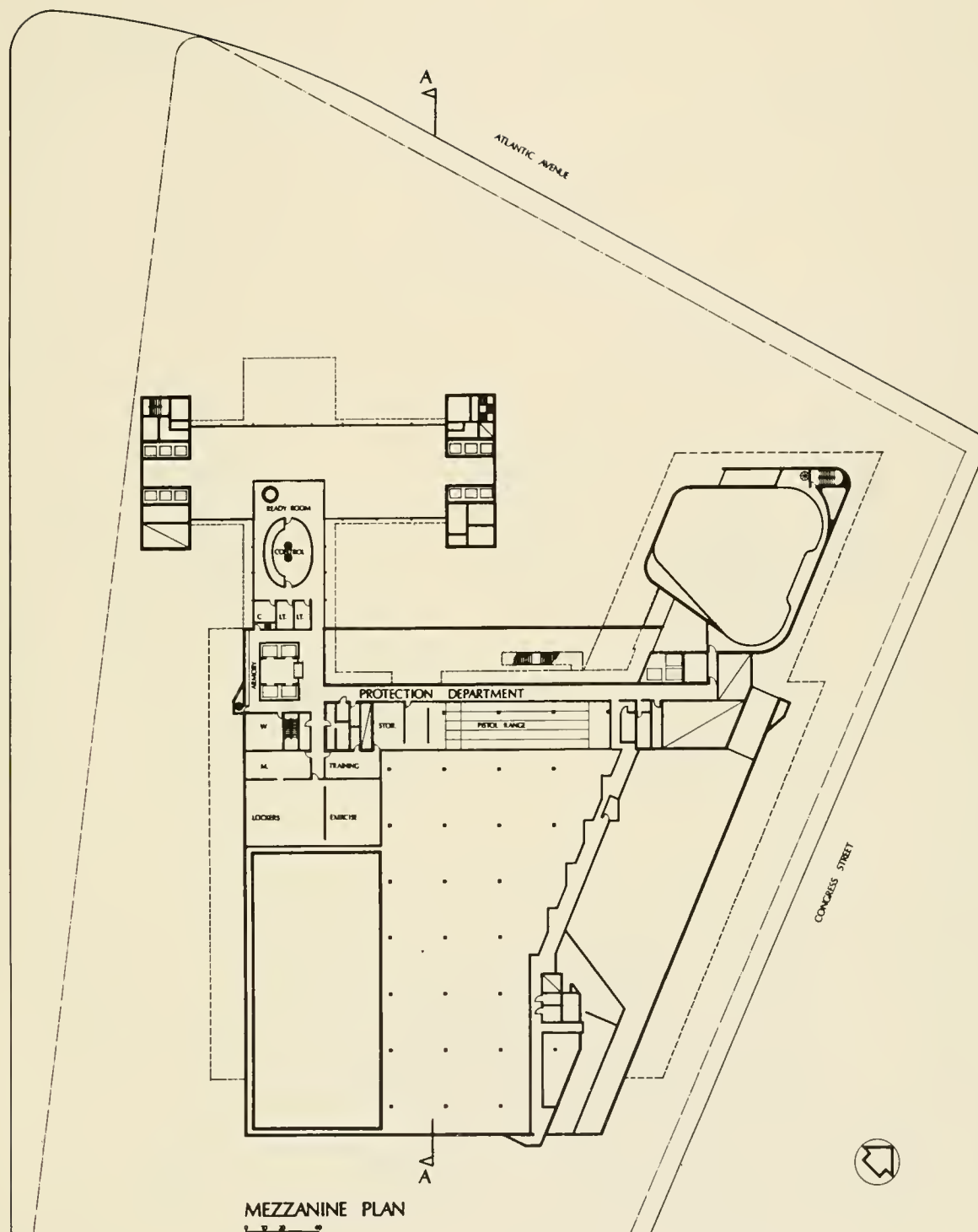


SITE PLAN



FEDERAL RESERVE BANK OF BOSTON
SEAL BEARING AND DESIGN ARE NOT TO BE REPRODUCED





SUNAMER STREET

A

ATLANTIC AVENUE

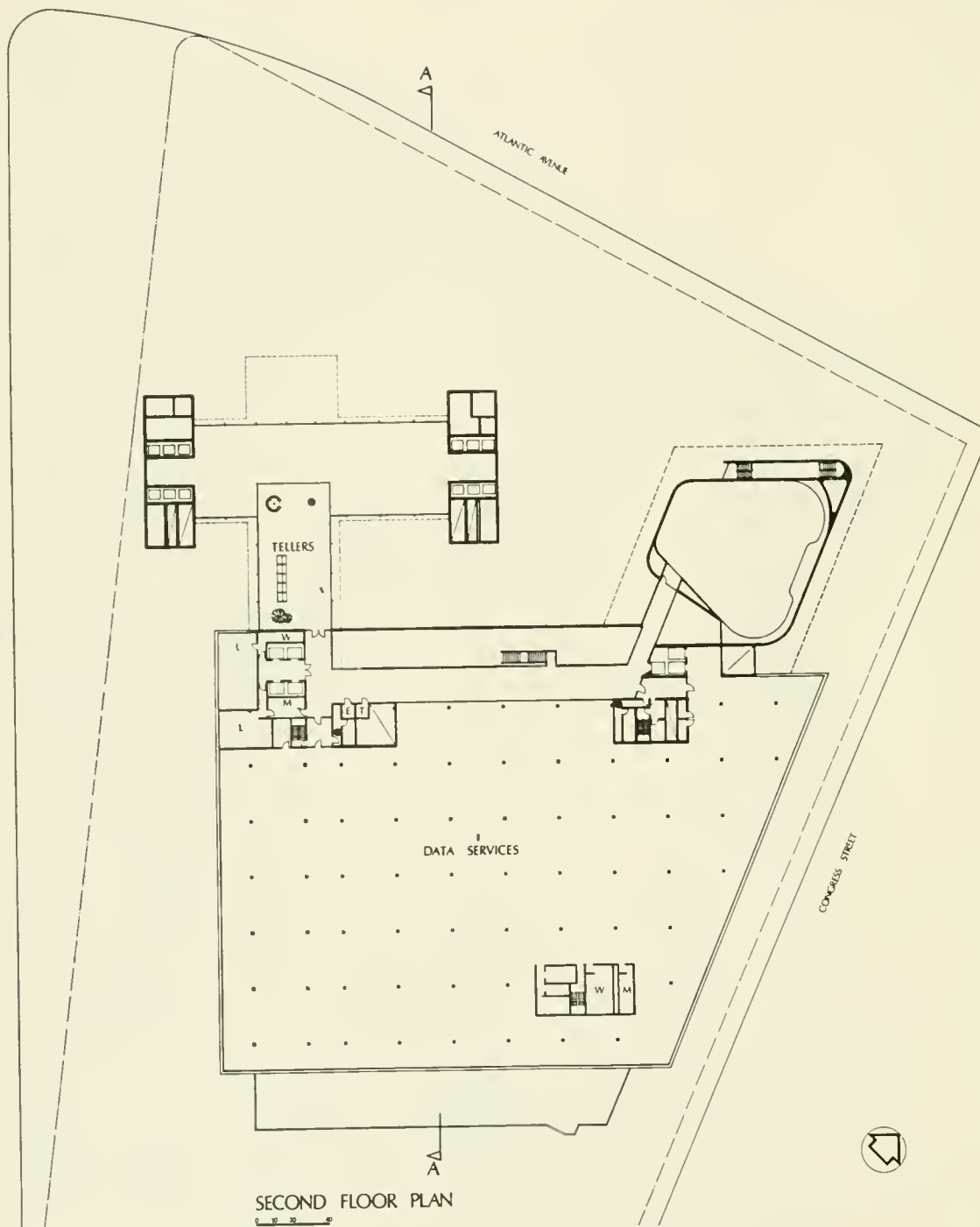
TELLERS

DATA SERVICES

CONGRESS STREET

SECOND FLOOR PLAN

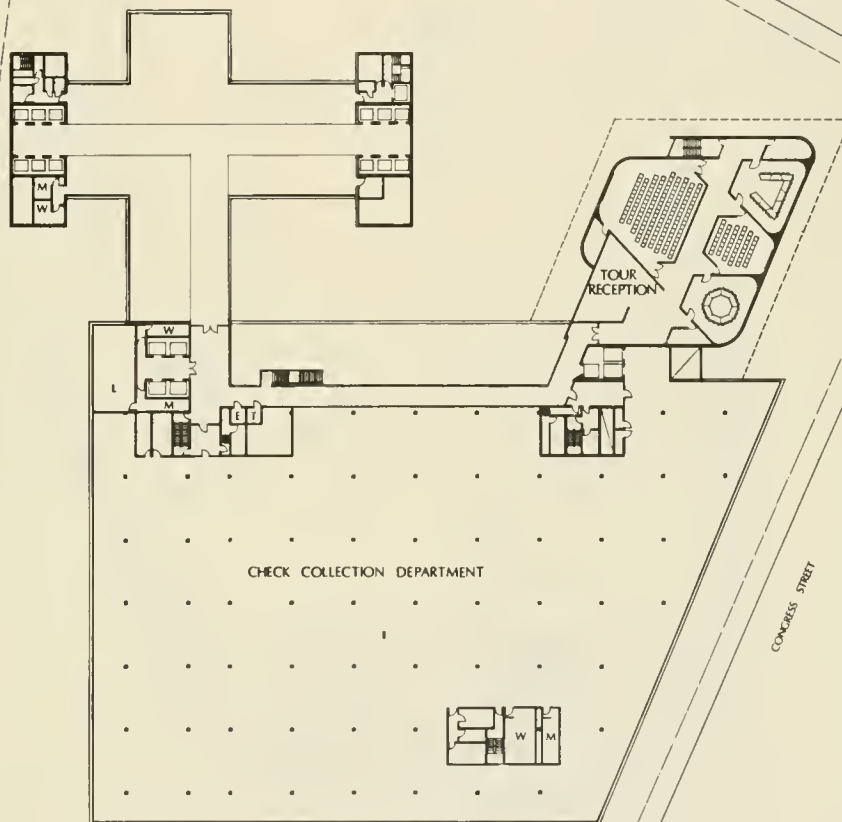
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SUMMER STREET

A

ATLANTIC AVENUE



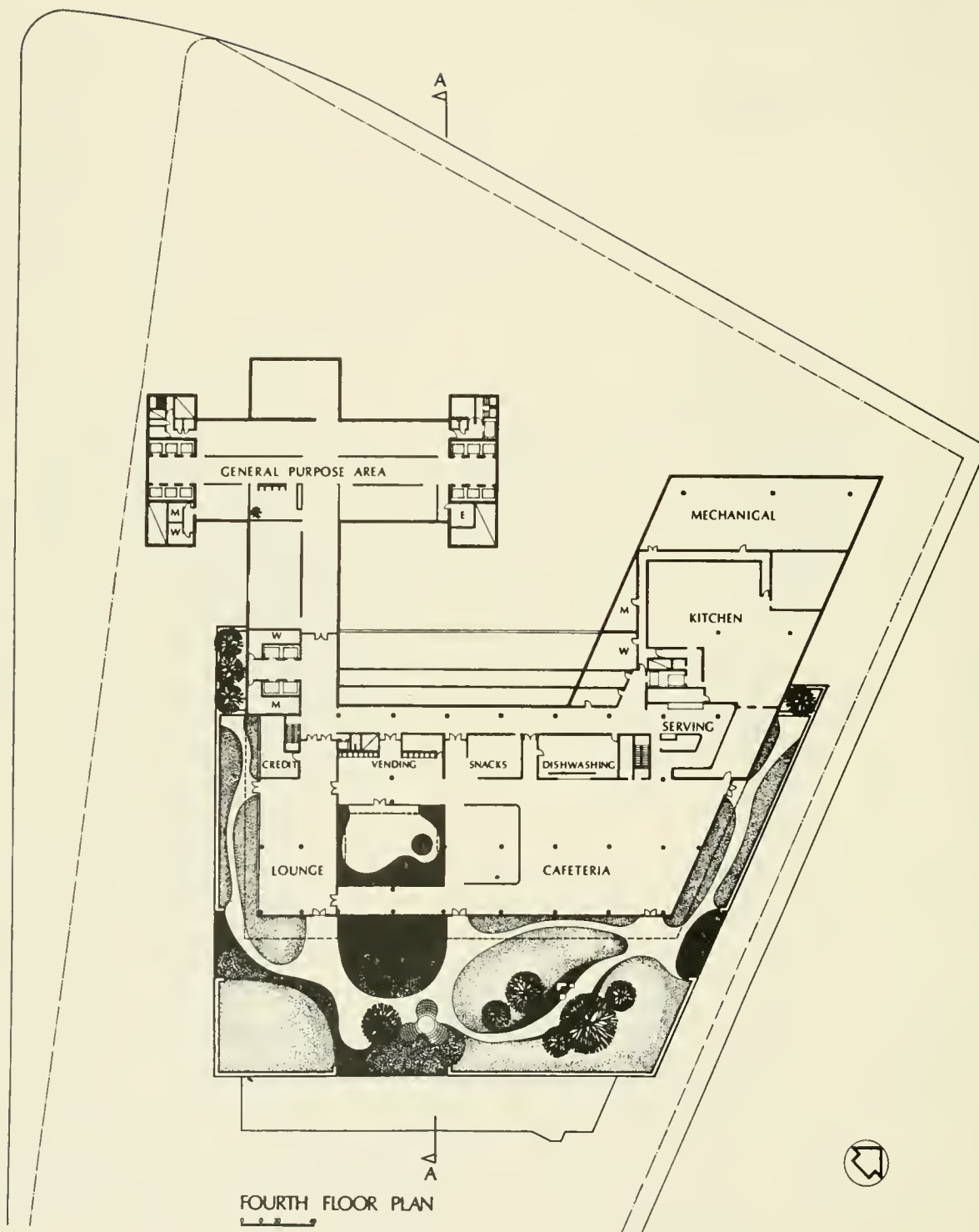
THIRD FLOOR PLAN

1 2 3 4 5 6 7 8 9 10

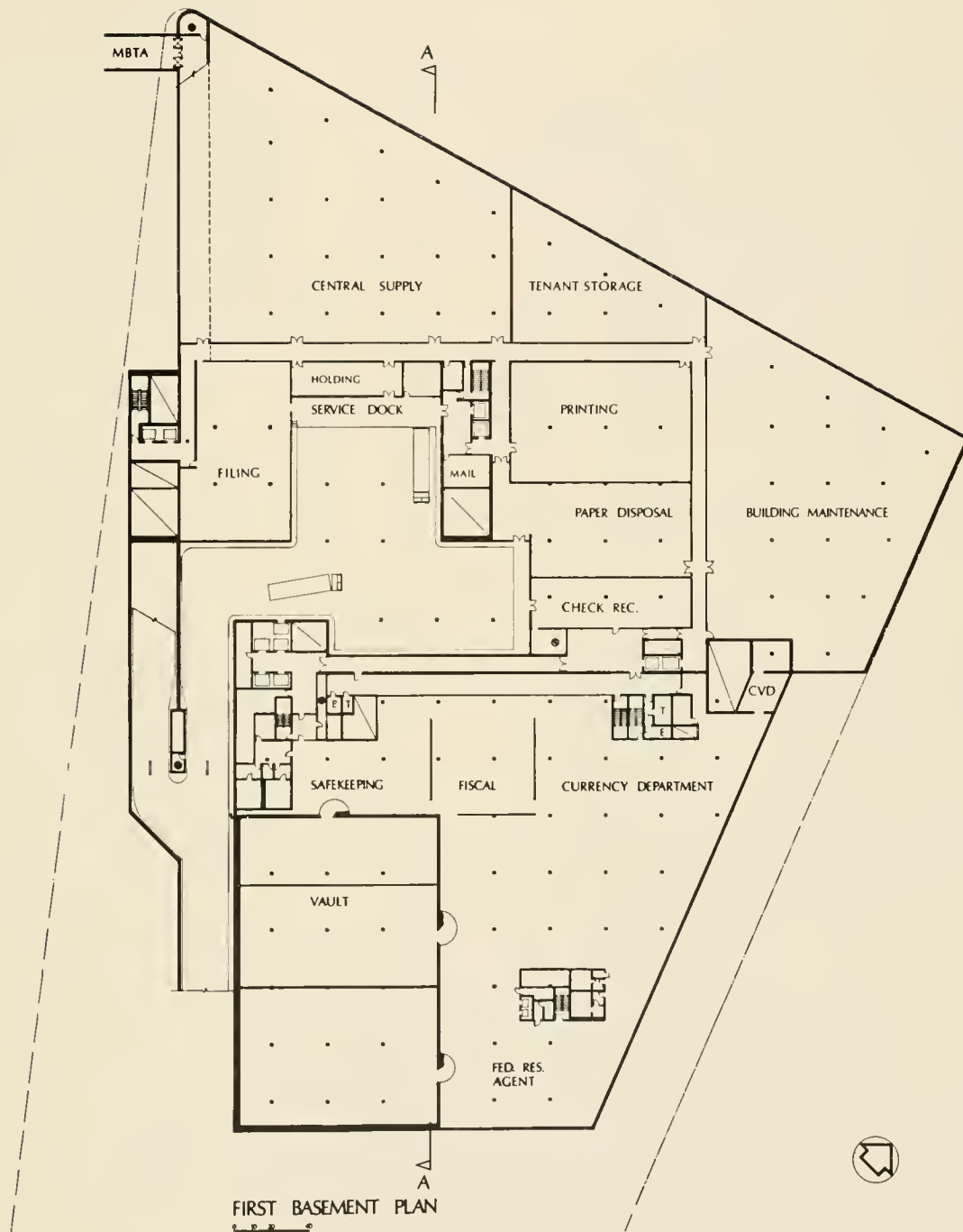
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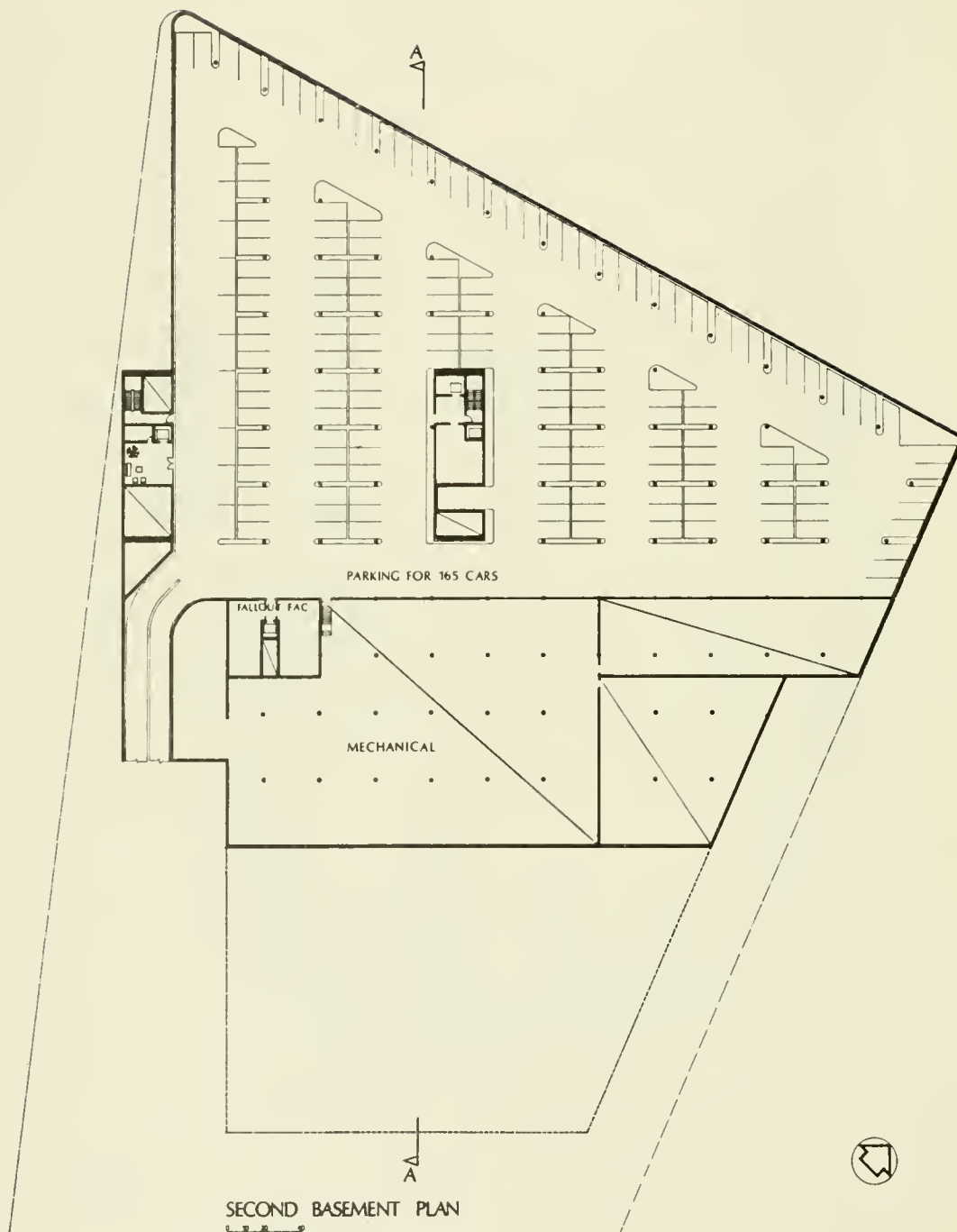
CONGRESS STREET

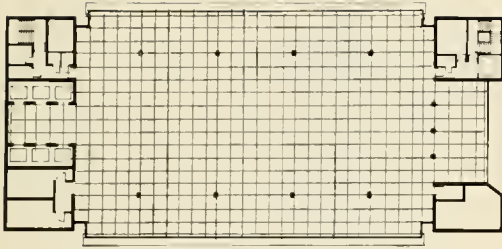




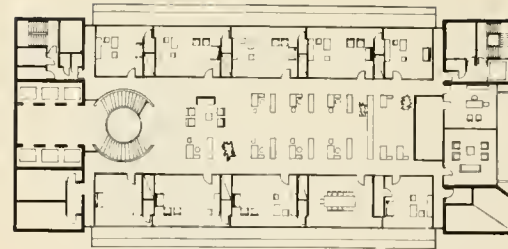
FOURTH FLOOR PLAN



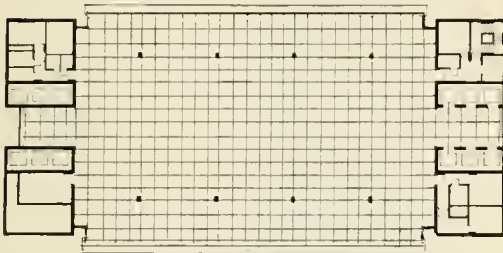




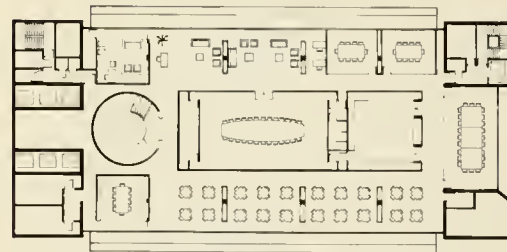
TYPICAL FLOOR PLAN
HIGH RISE ELEVATOR BANK



EXECUTIVE FLOOR
32nd FLOOR

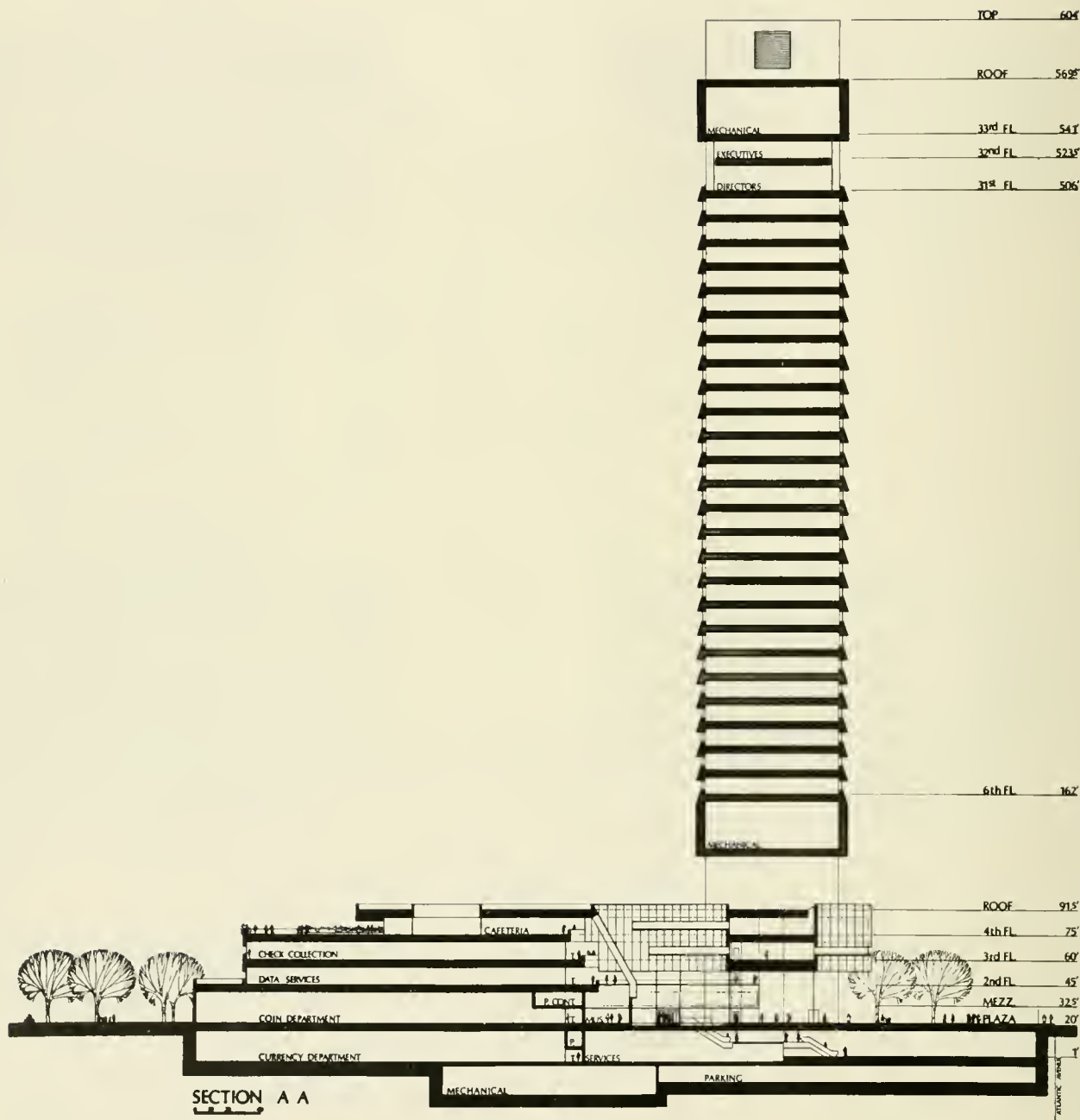


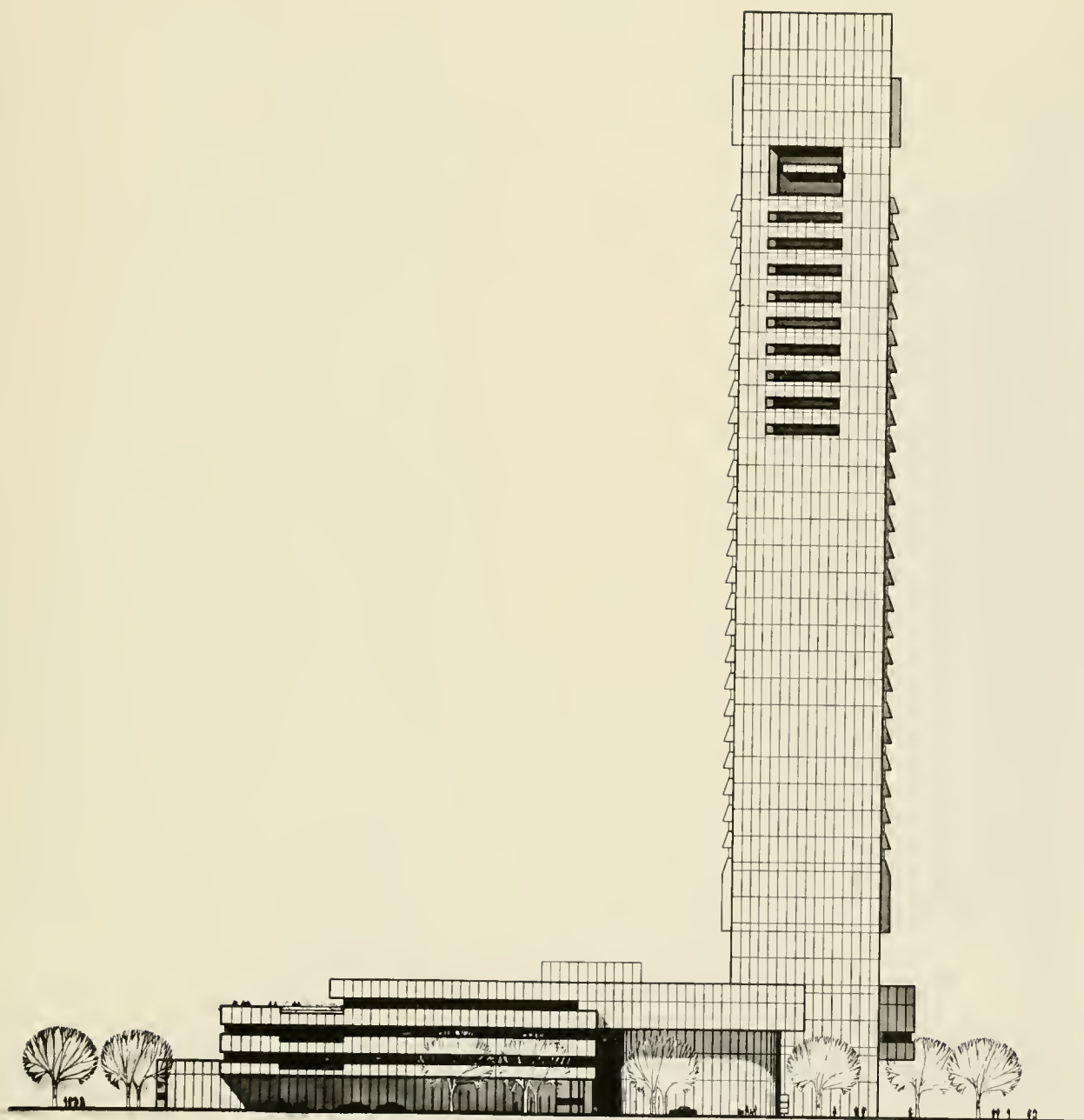
TYPICAL FLOOR PLAN
LOW RISE ELEVATOR BANK



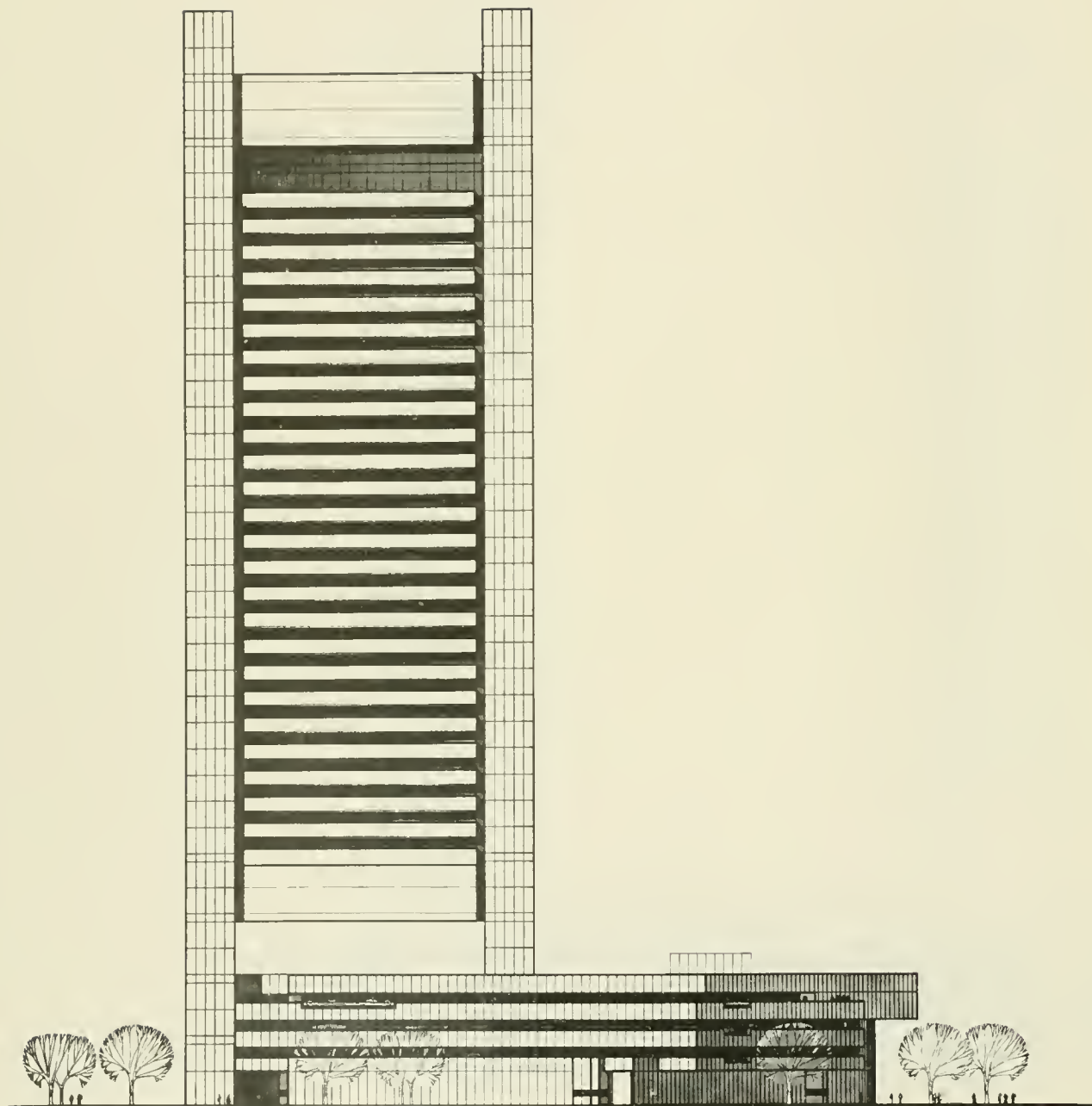
BOARD ROOM / EXECUTIVE DINING LEVEL
31st FLOOR



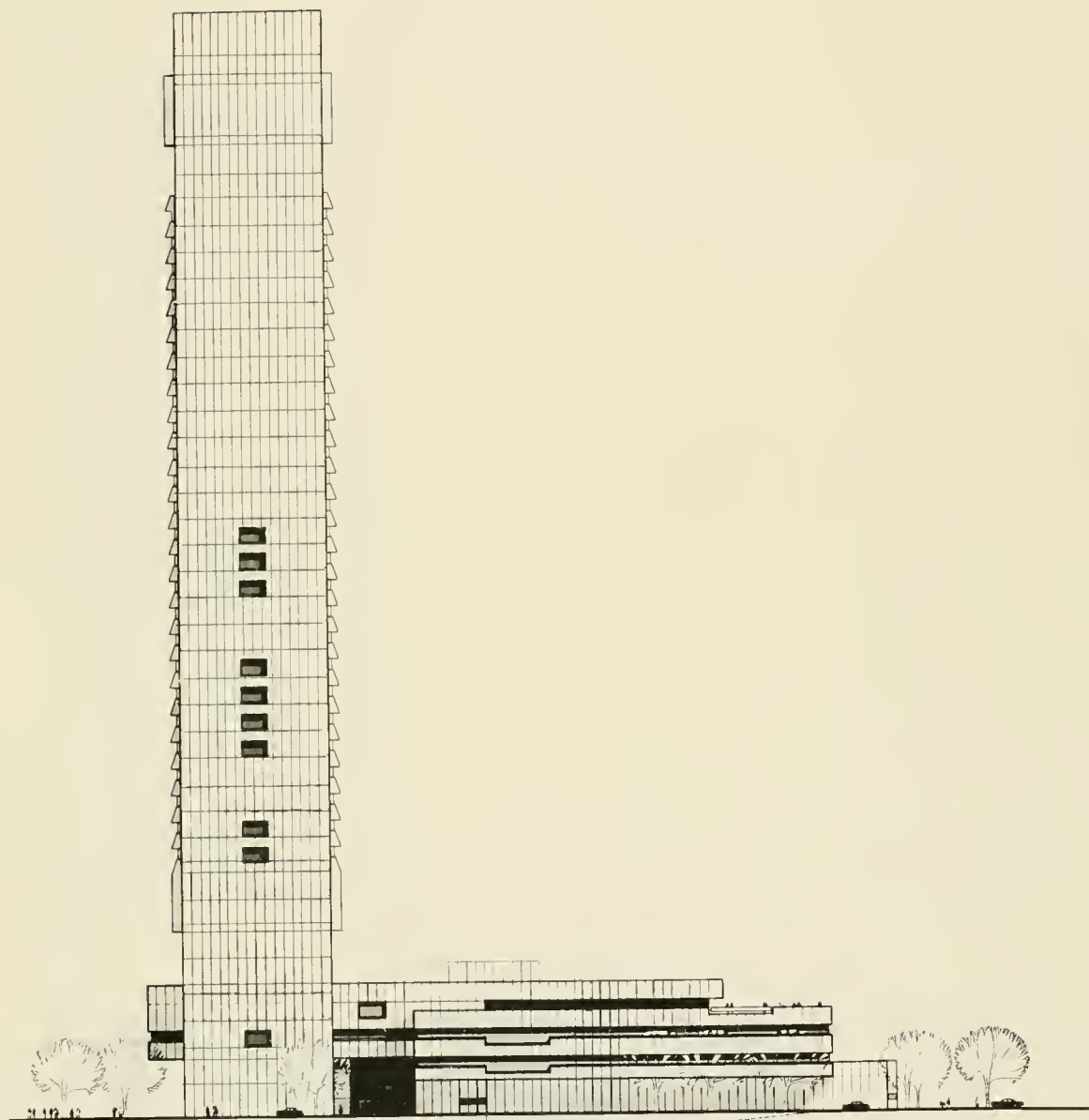




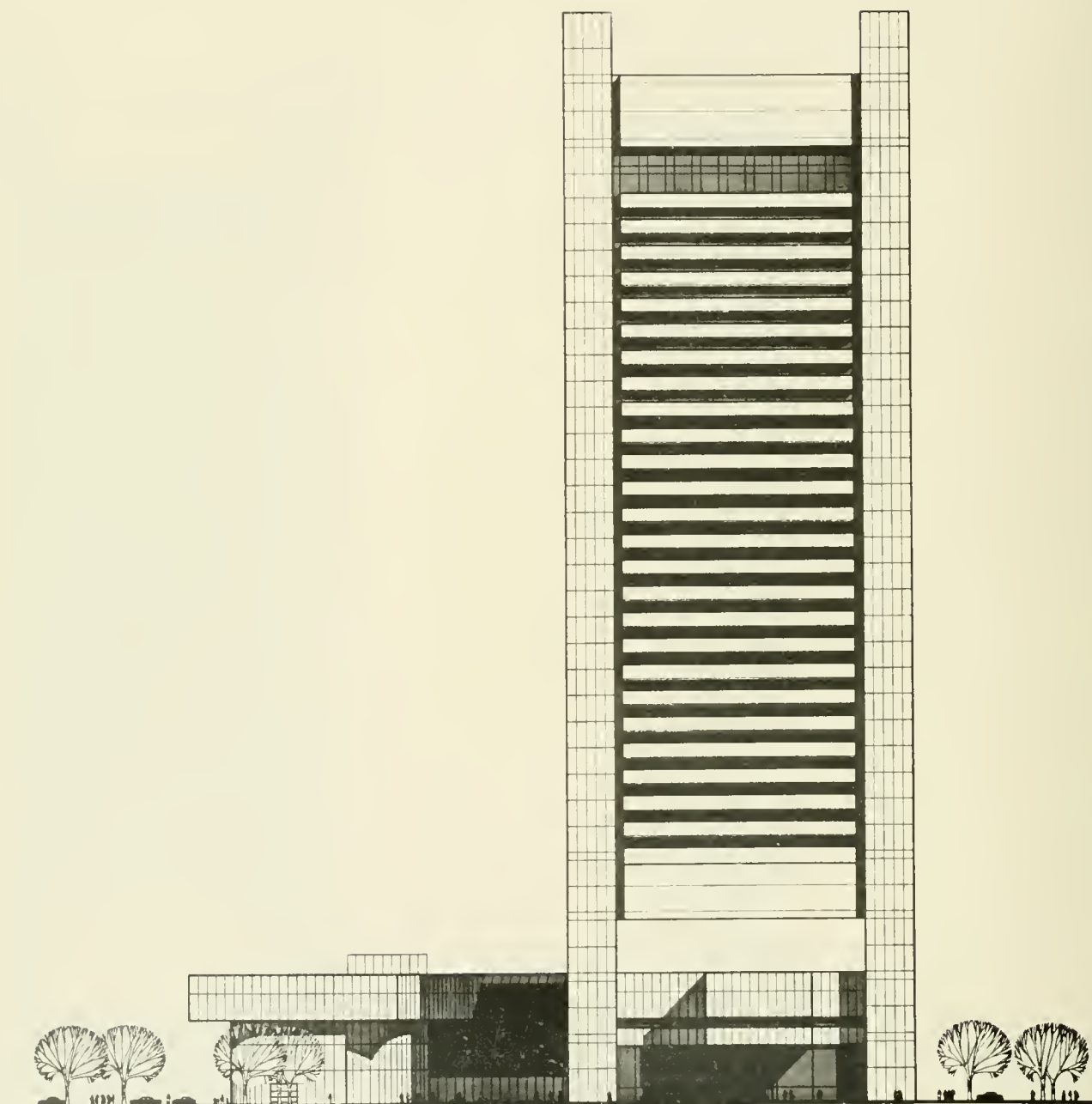
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

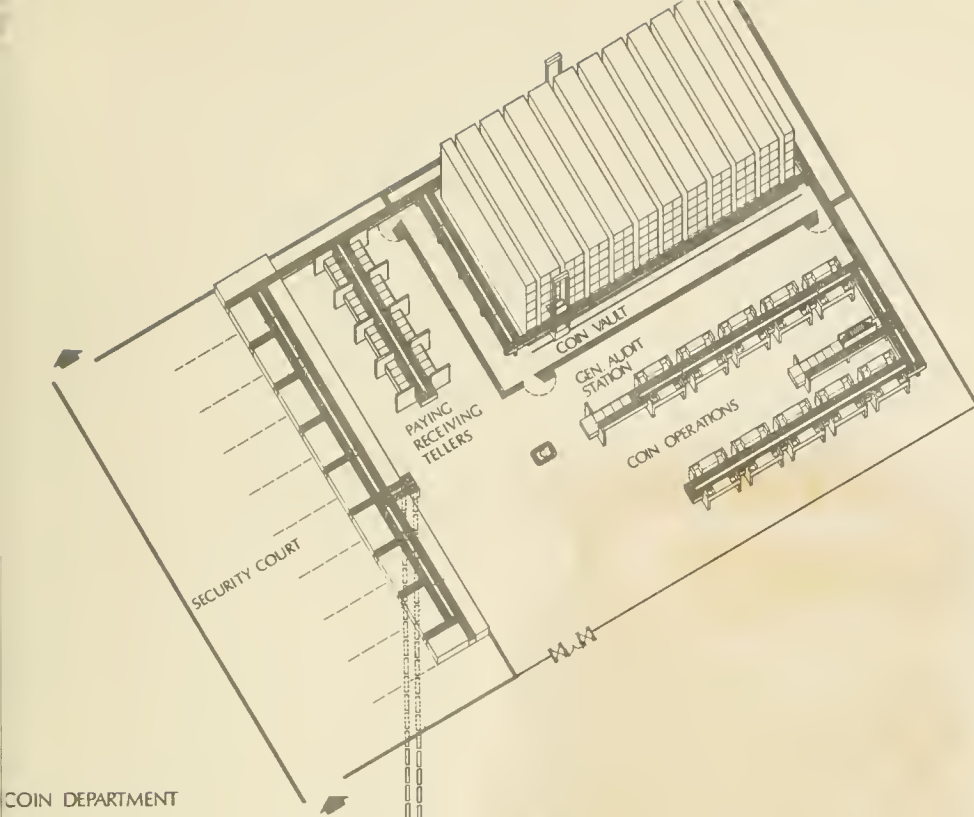
VIEW FROM ATLANTIC AVE. SHOWING FEDERAL RESERVE PLAZA



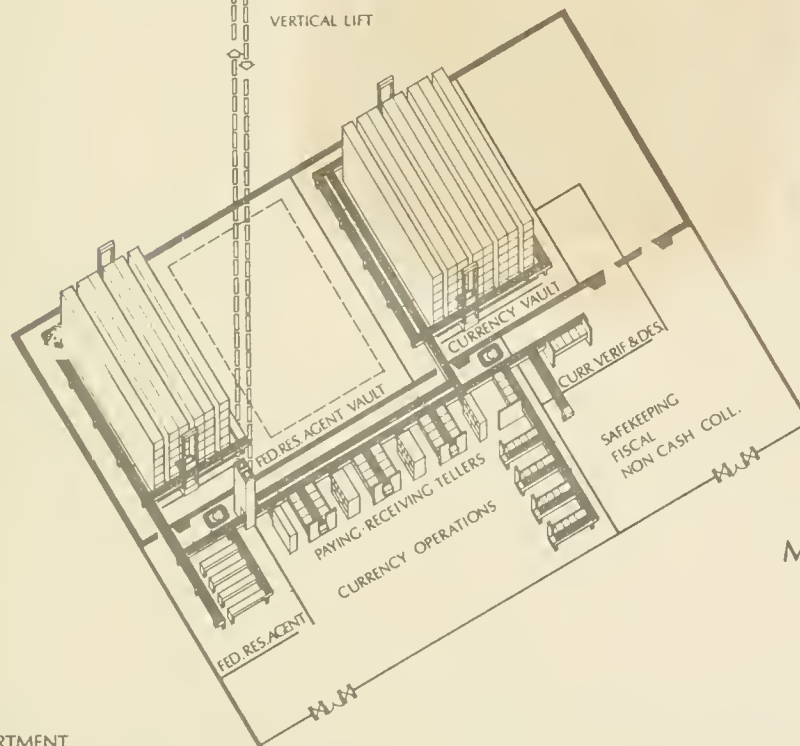
MATERIALS HANDLING SYSTEM

All shipments to member banks pass through the Coin and Currency Departments and the related Security Court. It is the Architect's objective to devise an integrated horizontal and vertical system of maximum security and efficiency covering all phases of handling currency.

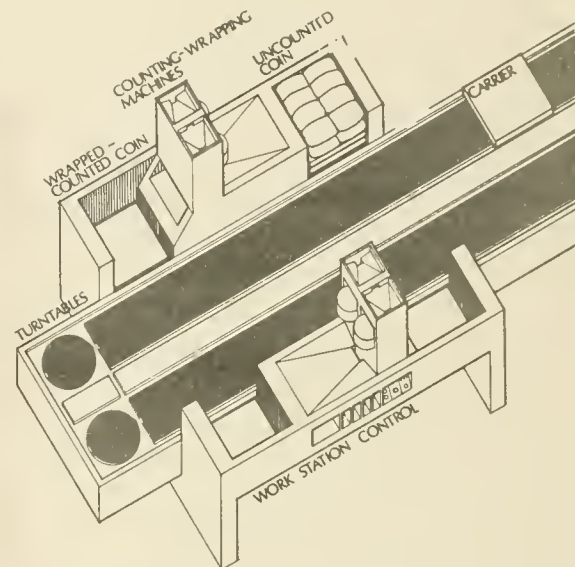
Further development of the plans will indicate a system of coin and currency handling for improved working conditions and will eliminate the need for staff to travel between departments. During periodic auditing, materials will be removed from vaults without interference to normal working procedures. The new system will also facilitate the maintenance of inventories and historical records for all money transactions.



COIN DEPARTMENT



CURRENCY DEPARTMENT



WORK STATION - COIN OPERATIONS

MATERIALS HANDLING SYSTEM

SOUTH STATION 591F c.1
Federal Reserve Bank of
Boston.
Design development report.

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